WHAT IS CLAIMED IS:

1. A digital still video camera having a function for transaction of image data as well as control data with external devices comprising:

a picture information input means from receiving image information from an image forming apparatus, one of said external device;

a picture information memory means for storing therein picture information inputted from said picture information input means; and

a converting/sending means for converting image data to be sent to said image forming apparatus to image data adapted to said image forming apparatus according to the picture information stored in said picture information memory means and sending the image data using a synchronizing signal adapted to said image forming apparatus.

2. A digital still video camera having a function for transaction of image data as well as control data with external devices comprising:

a memory means for previously storing a plurality of picture information for the image forming apparatus as one of said external devices in correspondence to types of said image forming apparatus;

a selecting means for selecting desired picture information for an image forming apparatus from the picture information stored in said memory means; and

a converting/sending means for converting image data to be sent to said image forming apparatus to image data adapted to said image forming apparatus according to said selected picture information for the image forming apparatus and sending the image data using a synchronizing signal adapted to said image forming apparatus.

3.   An image data output system for a digital still video camera for outputting image data for a digital still video camera having the function for transaction of data to recording paper through the image forming apparatus, wherein said image forming apparatus comprises:

a first memory means for storing the picture information for the apparatus; and

a sending means for the picture information stored in said first memory means in response to a request from said digital still video camera to the side of the digital still video camera, and said digital still video camera comprises:

a picture information reading means for requesting picture information to be sent to said sending means in a case where image data is to be outputted through said image forming apparatus and reading in said picture information;

a second memory means for storing the picture information read in from said picture information reading means; and

a converting/sending means for converting image data to be sent to said image forming apparatus to image data adapted to said image forming apparatus according to the picture

information stored in said second memory means and sending the image data using a synchronizing signal adapted to said image forming apparatus.

4.   A digital still video camera having an image data generating means for photographing an image and generating image data for the image and a voice data generating means for inputting voices and generating voice data for the voices, and for recording the generated image data as well as voice data in a recording medium, said camera comprising:

a character code generating means for recognizing voice data generated by said voice data generating means and generating character code corresponding to said voice data; and

a recording control means for controlling said image data generating means, voice data generating means, and character code generating means, and recording said character code in relation to said image data in said recording medium.

5.   A digital still video camera according to claim 4, wherein said recording control means receives voice data and generates character code by controlling said voice data generating means as well as said character code generating means, then photographs image and generates image data for the image by controlling said image data generating means, and records said character code and said image data as an identical file in said recording medium.

6.   A digital still video camera according to claim 4, wherein said recording control means photographs image and generates image data for the image by controlling said image data generating means, then receives voice data and generates character code by controlling said voice data generating means as well as said character code generating means, and records said image data and said character code as an identical file in said recording medium.

7.   A digital still video camera having an image data generating means for photographing an image and generating image data for the image and a voice data generating means for inputting voices and generating voice data for the voices to record the generated image data as well as voice data in a recording medium, said camera comprising:

an image displaying means for displaying image data as well as various types of information;

a character code generating means for recognizing the voice data generated by said voice data generating means and generating character code corresponding to said voice data;

a recording control means for controlling said image data generating means, voice data generating means, and character code generating means, and recording said character code in relation to said image data in said recording medium;

a voice data regenerating means for regenerating said character code to voice data;

a voice output means for outputting voices according to said

voice data; and

a regenerating control means for controlling said voice data regenerating means as well as voice data output means and outputting said character code as voices when the image data as well as character code each stored in said storage medium are regenerated, and displaying said character code by controlling said image displaying means.

8. A digital still video camera according to claim 7, wherein said recording control means receives voice data and generates character code by controlling said voice data generating means as well as said character code generating means, then photographs image and generates image data for the image by controlling said image data generating means, and records said character code and said image data as an identical file in said recording medium.

9. A digital still video camera according to claim 7, wherein said recording control means photographs image and generates image data for the image by controlling said image data generating means, then receives voice data and generates character code by controlling said voice data generating means as well as said character code generating means, and records said image data and said character code as an identical file in said recording medium.

10.   A digital still video camera having an image data generating means for photographing an image and generating image data for the image and a voice data generating means for receiving voices and generating voice data for the voices to

5   record the generated image data as well as voice data in the recording medium, said camera comprising:

a voiceprint information generating means for receiving voice data from said voice data generating means and generating voiceprint information corresponding thereto;

10   a memory means provided inside the basic body of the apparatus for storing the voiceprint information;

a voiceprint information registering means for registering the voiceprint information in said memory means;

a determining means for comparing the voiceprint information

15   registered in said memory means through said voiceprint information registering means to the voiceprint information generated from the received voice data and determining whether both of the voiceprint information are identical to each other or not; and

20   an enabling/disabling control means for enabling the digital still video camera in a case where said determining means has determined that both are identical and disabling the digital still video camera in a case where said determining means has determined that both are not identical.

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11. A digital still video camera having an image data generating means for photographing an image and generating image data for the image and a voice data generating means for receiving voices and generating voice data for the voices to record the generated image data as well as voice data in the recording medium, said camera comprising:

a voiceprint information generating means for receiving voice data from said voice data generating means and generating voiceprint information corresponding thereto;

a voiceprint information registering means for registering the voiceprint information in said recording medium;

a determining means for comparing the voiceprint information registered in said recording medium through said voiceprint information registering means to the voiceprint information generated from the received voice data and determining whether both of the voiceprint information are identical to each other or not; and

a permission/inhibition controlling means for permitting use of said recording medium in a case where said determining means has determined that both are identical and inhibiting use of said recording medium in a case where said determining means has determined that both are not identical.

12. A frame for data relay for a digital still video camera for receiving data through radio communication from the digital still video camera having a function for radio communication using infrared rays for data transaction, said frame comprising:

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a retaining means for stably retaining said digital still video camera;

a radio communicating means for data transaction through radio communication with the digital still video camera retained by said retaining means; and

a data input/output means for outputting the data received from said radio communicating means to external device and also outputting the data received from said external device to said radio communicating means.

13.   A data transfer system for a digital still video camera for transferring data between the digital still video camera and a computer, wherein said computer comprises:

an application means for providing operation control over said digital still video camera, and said digital still video camera comprises:

a determining means for making determination as to whether the computer to which data is to be transferred has said application means or not; and

a key entry inhibiting means for inhibiting the key entry from the camera in a case where said determining means has determined that the computer has the application means, and also wherein, in the case when said computer ha the application means, the key entry from said digital still video camera is inhibited and operation control of the digital still video camera is executed by the application means provided in said computer.

14.   A data transfer system for a digital still video camera for transferring data between the digital still video camera . and an external device, wherein said external device comprises:

an application means for providing operation control over
5   said digital still video camera, and said digital still video camera comprises:

a selecting means for selecting with which of the digital still video camera or the external device operation control over the device is to be executed; and

10   an operation control validating means for validating operation control of either one of the device or the external device according to a result of selection by said selecting means, and also wherein, in the case where the external device has been selected by said selecting means, the operation
15   control over said external device is validated, and operation control over the digital still video camera is executed by the application means provided in said external device.

15.   A data transfer system for a digital still video camera
20   for transferring data between the digital still video camera and an external device, wherein said external device comprises:

an application means for providing operation control over said digital still video camera, and said digital still video camera comprises:

25   an operation section function selecting means for comparing functions for the operation section in the device to functions for the operation section in said external device and selecting

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either of the operation sections which has more excellent functions;

an operation control validating means for validating control by either one of the device or the external device according to a result of selection by said operation section function selecting means, and also wherein, in the case where said operation section function selecting means has selected the external device, the operation control over said external device is validated, and operation control over the digital still video camera is executed by the application means provided in said external device.

16.   A digital still video camera for photographing an image and recording the image in a recording medium such as a memory card or the like, said camera comprising:

an image compressing means capable of executing processing for compressing the image with at least two different types of compression rate; and

a memory means for storing mask information comprising a plurality of areas in which one of said at least two types of different compression rate is set;   wherein said image compressing means divides an image for one screen into a plurality of areas using the plurality of areas of the mask information stored in said memory means and subjects the image to compression processing with the compression rate of said mask information corresponding to said divided areas.

17.   A digital still video camera according to claim 16 comprising a selecting means for selecting desired mask information from a plurality of mask information, wherein said memory means stores a plurality of different mask information, and said image compressing means executes said compression processing using the mask information selected by said selecting means.

18.   A digital still video camera according to claim 16 comprising a mask information generating/registering means for generating said mask information and registering the information in said memory means so that a user can freely generate or change said mask information thereby.

19.   A digital still video camera for photographing an image and recording the image in a recording medium such as a memory card or the like, said camera comprising:

an image compressing/extending means capable of executing processing for compression or extension of an image with at least two different types of compression rate; and

a memory means for storing mask information comprising a plurality of areas in which one of said at least two types of different compression rate is set; wherein said image compressing/extending means divides an image for one screen into a plurality of areas using the plurality of areas of the mask information stored in said memory means and executes the processing for compression or extension of the image with the

compression rate of said mask information corresponding to each of said divided areas.

20.   A digital still video camera according to claim 19 comprising a selecting means for selecting desired mask information from a plurality of mask information; wherein said memory means stores a plurality of different mask information, and said image compressing/extending means executes said compression processing or extension processing using the mask information selected by said selecting means.

21.   A digital still video camera according to claim 19 comprising a mask information generating/registering means for generating said mask information and registering the information in said memory means so that a user can freely generate or change said mask information thereby.

22.   A digital still video camera for photographing an image and recording the image in a recording medium such as a memory card or the like, said camera comprising:

an image compressing means capable of executing the processing for compression of the image with at least two different types of compression rate;

a memory means for storing mask information comprising a plurality of areas in which one of said at least two types of different compression rate is set;

a specifying means for specifying whether compression

processing with said mask information is to be executed or not; and

an adding means for adding mask identifying information for identifying said used mask information to the image after having been subjected to compression processing in a case where the compression processing with said mask information has been specified by said specifying means and recording the added image in said recording medium; wherein said image compressing means divides an image for one screen into a plurality of areas using the plurality of areas of the mask information stored in said memory means and executes the processing for compression of the image with the compression rate of said mask information corresponding to said divided areas in a case where the compression processing using said mask information has been specified by said specifying means when the image is to be recorded.

23.   A digital still video camera according to claim 22 comprising a selecting means for selecting desired mask information from a plurality of mask information, wherein said memory means stores a plurality of different mask information, and said image compressing means executes said compression processing using the mask information selected by said selecting means.

24.   A digital still video camera according to claim 22 comprising a mask information generating/registering means for generating said mask information and registering the information in said memory means so that a user can freely generate or change said mask information thereby.

25.   A digital still video camera for photographing an image and recording the image in a recording medium such as a memory card or the like, said camera comprising:

an image compressing/extending means for compression or extension of the image with at least two different types of compression rate;

a memory means for storing mask information comprising a plurality of areas in which one of said at least two types of different compression rate is set;

a specifying means for specifying whether compression processing with said mask information is to be executed or not; and

an adding means for adding mask identifying information for identifying said used mask information to the image after having been subjected to compression processing in a case where the compression processing with said mask information has been specified by said specifying means and recording the added image in said recording medium; wherein said image compressing/extending means divides one of image into a plurality of areas using the plurality of areas of the mask information stored in said memory means and executes the

processing for compression of the image with the compression rate of said mask information corresponding to said divided areas in a case where the compression processing using said mask information has been specified by said specifying means when the image is to be recorded, and divides an image for one screen into a plurality of areas using the plurality of areas of the mask information stored in said memory means and executes the processing for extension of the image with the compression rate of said mask information corresponding to said divided areas in a case where said mask identifying information is added to the image recorded in said recording medium when the image is to be extended.

26.   A digital still video camera according to claim 25 comprising a selecting means for selecting desired mask information from a plurality of mask information; wherein said memory means stores a plurality of different mask information, and said image compressing/extending means executes said compression processing or extension processing using the mask information selected by said selecting means.

27.   A digital still video camera according to claim 25 comprising a mask information generating/registering means for generating said mask information and registering the information in said memory means so that a user can freely generate or change said mask information thereby.

28.   An image regenerating apparatus for receiving an image
from the recording medium in which the image subjected to
compression processing is recorded and generating the image by
subjecting the image to the extension processing, said
apparatus comprising:

an image extending means capable of executing the processing
for extension of an image with at least two types of different
compression rate; and

a memory means for storing mask information comprising a
plurality of areas in which one of said at least two types of
compression rate is set; wherein said image extending means
divides an image for one screen into a plurality of areas using
the plurality of areas of the mask information stored in said
memory means and executes the processing for extension of the
image with the compression rate of said mask information
corresponding to said divided areas.

29.   An image regenerating apparatus according to claim 28
comprising a mask information generating/registering means for
generating said mask information and registering the
information in said memory means, so that a user can freely
generate or change said mask information thereby.

30.   An image regenerating apparatus for receiving an image
from the recording medium in which the image subjected to
compression processing is recorded and generating the image by
being subjected to extension processing, said apparatus

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comprising:

an image extending means capable of executing the extension processing of an image with at least two types of different compression rate; and

a memory means for storing mask information comprising a plurality of areas in which one of said at least two types of compression rate is set; wherein said image extending means divides an image for one screen into a plurality of areas using the plurality of areas of the mask information stored in said memory means and executes the processing for extension of the image with the compression rate of said mask information corresponding to said divided areas in a case where such specified information that said mask information is used is added to the image recorded in said recording medium.

31. An image regenerating apparatus according to claim 30 comprising a mask information generating/registering means for generating said mask information and registering the information in said memory means, so that a user can freely generate or change said mask information thereby.

32. An image regenerating apparatus according to claim 28 comprising a selecting means for selecting desired mask information among a plurality of mask information, wherein said memory means stores a plurality of different mask information, and said image extending means executes said the extension processing using the mask information selected by said

selecting means.

33. An image regenerating apparatus according to claim 32 comprising a mask information generating/registering means for generating said mask information and registering the information in said memory means, so that a user can freely generate or change said mask information thereby.

34. A digital still video camera for recording at least the photographed image in a recording medium comprising:

a residual memory space computing means for computing a residual memory of said recording medium;

a setting means for setting therein a residual memory space reporting mode to report the residual memory space of said recording medium;

a voice output means for outputting voices; and

a residual memory space reporting means for outputting the residual memory space computed by said residual memory space computing means through said voice output means in a case where the residual memory space reporting mode has been set by said setting means.

35. A digital still video camera for recording at least the photographed image in a recording medium comprising:

a residual memory space computing means for computing a residual memory space of said recording medium;

a setting means for setting therein a residual memory space

reporting mode to report the residual memory space of said recording medium;

a plurality of voice output means for outputting voices;

a specifying means for specifying which of said plurality of voice output means is to be used; and

a residual memory space reporting means for outputting the residual capacity computed by said residual memory space computing means through the voice output means corresponding thereto according to the specification of said specifying means in a case where the residual memory space reporting mode has been set by said setting means.

36.   A digital still video camera having a plurality of recording modes such as an image recording mode, a voice recording mode, and an image/voice mixture recording mode and for recording the photographed image and the received voices in a recording medium, said camera comprising:

a residual memory space computing means for computing a residual memory space of said recording medium;

a setting means for setting therein a residual memory space reporting mode to report the residual memory space of said recording medium;

a voice output means for outputting voices;

a recording mode specifying means for specifying any of said plurality of recording modes in which the residual memory space of said recording medium is to be reported; and

a residual memory space reporting means for outputting the

residual memory space computed by said residual memory space computing means through the voice output means in a case where a residual memory space reporting mode has been set by said setting means and the set recording mode is the recording mode

5   specified by said recording mode specifying means.

37.   A digital still video camera for recording at least the photographed image in a recording medium comprising:

a residual memory space computing means for computing a

10   residual memory space of said recording medium;

a reporting condition specifying means for specifying a reporting condition to report the residual memory space of said recording medium;

a voice output means for outputting voices; and

15   a residual memory space reporting means for outputting the residual memory space computed by said residual memory space computing means through the voice output means in a case where a reporting condition has been set by said reporting condition specifying means and the residual memory space computed by

20   said residual memory space computing means satisfies said reporting condition.

38.   A digital still video camera having a memory means for storing therein image data for the photographed image and an

25   image displaying means for displaying or regenerating/displaying said photographed image or the image data stored in said memory means, said camera also comprising:

a mask retaining means for retaining a plurality of masks each identifying a photographed image area;

a selecting means for selecting one of the masks retained in said mask retaining means; and

5 a control means for displaying the image on said image displaying means so that the object of a photograph can be seen through the photographed image area identified by said mask when the mask has been selected by said selecting means, storing the information relating to said mask with reference to 10 the image data for the photographed image area identified by said mask each according to a specified operation in said memory means, and identifying an image area according to said mask information and regenerating/displaying the image in a case where mask information related to said image data is 15 added to the image data when the image data stored in said memory means is to be regenerated and displayed on said image displaying means.

39. A digital still video camera according to claim 38 20 comprising a mask editing means for editing a mask to be retained in said mask retaining means.

40. A digital still video camera according to claim 38 having an input means for specifying any mask which a user desires, 25 wherein said selecting means selects any mask according to specification of the mask by said input means.

41.   A digital still video camera according to claim 38 having
a residual memory space recognizing means for recognizing a
residual memory space of said memory means, wherein said
selecting means automatically selects any mask prespecified by
said input means or a give mask in a case where said residual
memory space recognizing means recognizes that the residual
memory space of said memory means is not more than a specified
value.

42.   A digital still video camera according to claim 41,
wherein said control means computes a number of additional
sheets which can be recorded in said memory means according to
the residual memory space of said memory means recognized by
said residual memory space recognizing means, and displays said
number of additional sheets on said displaying means.